

STATEMENT OF BASIS
Michelin North America, Inc.
Midland City, AL
Dale County
604-0009

This proposed Title V Major Source Operating Permit renewal is issued under the provisions of ADEM Admin. Code r. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Michelin North America, Inc. was issued its existing Major Source Operating Permit (MSOP) on August 3, 2010, with an expiration date of August 31, 2015. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. Based on this rule, the application for renewal was due to be submitted to the Department no later than February 28, 2015, but no earlier than February 28, 2014. An application for permit renewal was received by the Department on June 19, 2014. Based on this the Department considers this to be a timely application. An application for permit renewal was submitted to the Department on February 27, 2015. Based on this the Department considers this to be a timely application.

Based on the Title V Permit application Michelin North America, Inc. is a major source for Sulfur Dioxide (SO₂) and Volatile Organic Compounds (VOC).

This Title V Major Source Operating Permit renewal will also incorporate equipment covered by Air Permits into the Major Source Operating Permit that have been issued to Michelin North America, Inc. since the last issuance. The Air Permits that are being incorporated into the Title V are the following:

- X028 PAL Permit Rubber Tire Manufacturing Facilities
- X029 2nd Stage Tire Assembly (1R, 2R, 3R, and 4R) with Michelin C Process
- X030 2nd Stage Tire Assembly (5R, 6R, 3T, and 4T) with Michelin C Process
- X031 Multex Undertread Cementing Extruder controlled by Boiler Incineration
- X032 Eight (8) Curing Presses

Rubber Preparation (Milling, Cutting, Joining, and Complexing) (EU001)

Textile and metallic tissue for first and second stage tire fabrication process is cut/joined. In this emission unit, heptane-like solvent is used to improve the tack of the rubber to facilitate joining/complexing of the product after cutting.

NSPS:

This emission unit is not subject to 40 CFR Part 60 Subpart BBB, "Standards of Performance for the Rubber Tire Manufacturing Industry" because the units are not listed as affected facilities.

Emission Standards:

These sources are not subject to any emissions standards other than those in the general provisios.

Expected Emissions:

The expected VOC emissions are based on PAL calculations for the last 12 months and the expected HAP emissions are based on AP-42 emission factors and operating 8,760 hours per year. The expected emissions are shown below:

Pollutant	Rubber Preparation	
	lb/hr	TPY
VOC	0.952	4.17
HAP	0.07	0.31

Periodic Monitoring, Recordkeeping, & Reporting:

These sources are not subject to any emissions standards other than those in the general provisos. Therefore the units are not subject to any additional monitoring or recordkeeping and reporting requirements other than those listed in the general provisos.

CAM:

These sources are uncontrolled; therefore, CAM does not apply.

BD1, BD3, BD4, and BD5 Extruding and Associated Milling (EU002)

Rubber is milled and extruded to form various components that will be used to build the tire. Emissions are from rubber heating in the extrusion process and heptanes-like solvent. BD1 has undertread cementing. BD1 and BD5 have mills associated with the extruder. Emissions from BD1 are voluntarily captured and controlled and emissions from BD3, BD4, and BD5 are uncontrolled.

NSPS:

BD3, BD4, and BD5 are not subject to 40 CFR Part 60 Subpart BBB, "Standards of Performance for the Rubber Tire Manufacturing Industry" because the units are not listed as affected facilities. BD1 is not subject to Subpart BBB because BD1 was constructed in 1979, prior to the January 20, 1983 applicability date for Subpart BBB.

Emission Standards:

These sources are not subject to any emissions standards other than those in the general provisos.

Expected Emissions:

The expected VOC emissions are based on PAL calculations for the last 12 months and the expected HAP emissions are based on AP-42 emission factors and operating 8,760 hours per year. The expected emissions are shown below:

Pollutant	BD1, BD3, BD4, and BD5	
	lb/hr	TPY
VOC	4.25	18.6
HAP	0.600	2.63

Periodic Monitoring, Recordkeeping, & Reporting:

These sources are not subject to any emissions standards other than those in the general provisos. Therefore the units are not subject to any additional monitoring or recordkeeping and reporting requirements other than those listed in the general provisos.

CAM:

These sources are uncontrolled; therefore, CAM does not apply.

BD2 and BD6 Extruders with Undertread Cementing and Boiler Incineration

Rubber is milled and extruded to form various components that will be used to build the tire. Emissions are from rubber heating in the extrusion process and heptanes-like solvent. Both extruders have undertread cementing. Undertread cementing emissions are controlled by exhausting to the boilers for incineration.

NSPS:

The undertread cementing portion of BD2 and BD6 are subject to the applicable requirements in 40 CFR Part 60 Subpart BBB, "Standards of Performance for the Rubber Tire Manufacturing Industry".

Emission Standards:

NSPS:

The Permittee shall for each undertread cementing operation discharge into the atmosphere no more than 25 percent of the VOC used (75 percent emission reduction) for each month.

40 CFR Part 60 Subpart BBB, §60.542(a)(1)(i)

Expected Emissions:

The expected VOC emissions are based on PAL calculations for the last 12 months and the expected HAP emissions are based on AP-42 emission factors and operating 8,760 hours per year. The expected emissions are shown below:

Pollutant	BD2 & BD6	
	lb/hr	TPY
VOC	2.79	12.22
HAP	0.530	2.32

Periodic Monitoring:

The owner or operator of an affected facility who elects to use a VOC emission reduction system with a control device that destroys VOC (e.g. incinerator), as described under §60.543(f) and (g), shall repeat the performance test when directed by the Administrator or when the owner or operator elects to operate the capture system or control device at conditions different from the most recent determination of overall reduction efficiency. The performance test shall be conducted in accordance with the procedures described under §60.543(f)(2)(i) through (iv).

40 CFR Part 60 Subpart BBB, §60.543(b)(2)

The Permittee shall calibrate, maintain, and operate according to manufacturer's specifications, a temperature monitoring device equipped with a continuous recorder for the temperature of the gas

stream in the combustion zone of the incinerator (Boilers 1-4). The temperature monitoring device shall have an accuracy of 1 percent of the temperature being measured in °C or ± 0.5 °C, whichever is greater.

40 CFR Part 60 Subpart BBB, §60.544(a)(1)

An owner or operator of an undertread cementing operation, sidewall cementing operation, green tire spraying operation where organic solvent-based sprays are used, or Michelin-B operation where a VOC recovery device other than a carbon absorber is used to meet the performance requirements specified under §60.543(j)(6), shall provide to the Administrator information describing the operation of the control device and the process parameter(s) which would indicate proper operation and maintenance of the device. The Administrator may request further information and will specify appropriate monitoring procedures or requirements.

40 CFR Part 60 Subpart BBB, §60.544(b)

CAM:

These sources do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Recordkeeping and Reporting:

Records of VOC content of any cements or sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

ADEM Admin. Code r. 335-3-16-.05(c)

The Permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation for which the average temperature of the gas stream in the combustion zone was more than 28 °C (50 °F) below the combustion zone temperature measured during the most recent determination of the destruction efficiency of the thermal incinerator that demonstrated that the affected facility was in compliance.

40 CFR Part 60 Subpart BBB, §60.545(a)

The Permittee shall report the results of the performance tests required under §60.543(b)(2). The following data shall be included in the report for each of the performance tests: The emission control device efficiency (E), the capture system efficiency (Fc), and the overall system emission reduction (R).

40 CFR Part 60 Subpart BBB, §60.546(c)(4)

The Permittee shall include the following data measured by the temperature monitoring device, in the report for each performance test specified under §60.546(c): The average combustion temperature measured at least every 15 minutes and averaged over the performance test period of incinerator destruction efficiency for each thermal incinerator.

40 CFR Part 60 Subpart BBB, §60.546(e)(1)

Once every 6 months the Permittee shall report each 3-hour period of operation for which the average temperature of the gas stream in the combustion zone of a thermal incinerator, as measured by the temperature monitoring device, is more than 28°C (50°F) below the combustion zone temperature measured during the most recent determination of the destruction efficiency of the thermal incinerator that demonstrated that the affected facility was in compliance. If no exceedances occurred during the reporting period then a letter shall be sent indicating that no exceedances occurred.

1st and 2nd Stage Tire Assembly with Michelin C Process (EU004)

Various rubber tire components are prepared and assembled in two stages to produce a green tire. Heptane-like solvent may be applied in the 2nd stage. Air emissions from the stages of tire building are a result of the heptane-like solvent use and rubber heating from limited extruding. There are no control devices on these units. This process (collectively referred to as EU004) consists of the following units:

1 st Stage	P1, P2	2 nd Stage	1P, 2P
	R1, R2, R3, R4, R5, R6, R7		1R, 2R, 3R, 4R, 5R, 6R, 7R
	S1, S2, S3		1S, 2S, 3S
	T3, T4, T5, T6, T7, T8		2T, 3T, 4T, 5T, 6T, 7T

NSPS:

The Michelin C portions of 1R, 2R, 3R, 4R, 5R, 6R, 1S, 2T, 3T, 4T, 5T, 6T, and 7T are subject to the applicable requirements in 40 CFR Part 60 Subpart BBB, “Standards of Performance for the Rubber Tire Manufacturing Industry”. The Michelin C portions of 7R, 2S, and 3S are not subject to Subpart BBB because the tire builders were constructed prior to the January 20, 1983 applicability date for Subpart BBB. The 1st stage tire builders are not subject to Subpart BBB because the units are not listed as affected facilities.

Emission Standards:

The emissions of volatile organic compounds (VOC) from each Michelin C portion of 1R, 2R, 3R, 4R, 5R, 6R, 1S, 2T, 3T, 4T, 5T, 6T, and 7T shall not exceed the limits below, depending on the duration of the compliance period:

- (a) 1,570 kilograms of VOC per 28 days
- (b) 1,630 kilograms of VOC per 29 days
- (c) 1,690 kilograms of VOC per 30 days
- (d) 1,740 kilograms of VOC per 31 days
- (e) 1,970 kilograms of VOC per 35 days

40 CFR Part 60 Subpart BBB, §60.542(a)(10)(ii)

There are no unit specific emission standards for the 1st stage tire builders and 7R, 2S, and 3S 2nd stage tire builders.

Expected Emissions:

The expected VOC emissions are based on PAL calculations for the last 12 months and the expected HAP emissions are based on AP-42 emission factors and operating 8,760 hours per year. The emissions are total for all tire builders (EU004 & EU005). The expected emissions are shown below:

Pollutant	1 st and 2 nd Tire Builders	
	lb/hr	TPY
VOC	39.04	170.98
HAP	0.23	0.80

Periodic Monitoring:

These units are not subject to any additional monitoring requirements other than those listed in the general provisos.

CAM:

These sources are uncontrolled; therefore, CAM does not apply.

Recordkeeping and Reporting:

Records of VOC content of any cements or sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

ADEM Admin. Code r. 335-3-16-.05(c)

Records summarizing the monthly VOC emissions from the undertread cementing portions of 1R, 2R, 3R, 4R, 5R, 6R, 1S, 2T, 3T, 4T, 5T, 6T, and 7T, and the number of days in each compliance period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

40 CFR Part 60 Subpart BBB, §60.545(d)

Monthly VOC emissions records shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period.

ADEM Admin. Code r. 335-3-16-.05(c)

During any month, twelve (12) month period, or other compliance period during which there is an exceedance of the VOC emission limit, the Department shall be notified in writing within twenty-four (24) hours of determining the exceedance. The notification shall include the following:

- (a) Dates covered during the reporting period;
- (b) Amount of VOC used during the reporting period;
- (c) Amount of VOC emitted during the reporting period;
- (d) Description of the cause of the exceedance; and
- (e) Description of any corrective action taken.

40 CFR Part 60 Subpart BBB, §60.546(f)(2)

1st and 2nd Stage Tire Assembly with Undertread Cementing with Boiler Incineration (EU005)

Various rubber tire components are prepared and assembled in two stages to produce a green tire. Heptane-like solvent may be applied in the 2nd stage. Air emissions from the stages of tire building are a result of the heptane-like solvent use and rubber heating from limited extruding. 1T and 1Q undertread cementing are exhausted to the boilers. This process (collectively referred to EU005) consists of the following units:

1 st Stage	T1, T2	2 nd Stage	0T, 1T
	Q1		1Q

NSPS:

The Michelin A, Michelin B, and Michelin C, and undertread cementing portions of these units are subject to the applicable requirements in 40 CFR Part 60 Subpart BBB, "Standards of Performance for the Rubber Tire Manufacturing Industry".

Emission Standards:

The emissions of volatile organic compounds (VOC) from the Michelin C portions of 0T, 1T, and 1Q shall not exceed the limits below, depending on the duration of the compliance period:

- (a) 1,570 kilograms of VOC per 28 days
- (b) 1,630 kilograms of VOC per 29 days
- (c) 1,690 kilograms of VOC per 30 days
- (d) 1,740 kilograms of VOC per 31 days
- (e) 1,970 kilograms of VOC per 35 days

40 CFR Part 60 Subpart BBB, §60.542(a)(10)(ii)

The emissions of volatile organic compounds (VOC) from the undertread cementing portions of 1T and 1Q shall not exceed the limits below, depending on the duration of the compliance period:

- (a) 3,870 kilograms of VOC per 28 days
- (b) 4,010 kilograms of VOC per 29 days
- (c) 4,150 kilograms of VOC per 30 days
- (d) 4,280 kilograms of VOC per 31 days
- (e) 4,840 kilograms of VOC per 35 days

40 CFR Part 60 Subpart BBB, §60.542(a)(1)(ii)

Combined total VOC emissions from unit 1Q and Q1 shall not exceed 39.5 tons during any consecutive twelve (12) month period.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Expected Emissions:

The expected VOC emissions are based on PAL calculations for the last 12 months and the expected HAP emissions are based on AP-42 emission factors and operating 8,760 hours per year. The emissions are total for all tire builders (EU004 & EU005). The expected emissions are shown below:

Pollutant	1 st and 2 nd Tire Builders	
	lb/hr	TPY
VOC	39.04	170.98
HAP	0.23	0.80

Periodic Monitoring:

The Permittee shall conduct biennial (every two years) source testing on one boiler each term in order to demonstrate overall average VOC reduction.

ADEM Admin. Code r. 335-3-16-.05(c)

As an alternative to biennial testing, the Permittee shall conduct initial testing on one boiler in order to demonstrate overall VOC reduction along with the operation of anemometers or some other comparable Department approved method to monitor the capture system operation.

ADEM Admin. Code r. 335-3-16-.05(c)

Any alternative monitoring system must be approved by the Department.

ADEM Admin. Code r. 335-3-16-.05(c)

CAM:

These sources do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Recordkeeping and Reporting:

Records of VOC content of any cements or sprays used in this process shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

ADEM Admin. Code r. 335-3-16-.05(c)

Records summarizing the monthly VOC emissions from the undertread cementing and the number of days in each compliance period shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

40 CFR Part 60 Subpart BBB, §60.545(d)

Records summarizing the rolling twelve (12) month total VOC emissions from 1Q and Q1 shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

ADEM Admin. Code r. 335-3-16-.05(c)

Monthly and updated twelve (12) monthly VOC emissions records shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period.

ADEM Admin. Code r. 335-3-16-.05(c)

During any month, twelve (12) month period, or other compliance period during which there is an exceedance of the VOC emission limit, the Department shall be notified in writing within twenty-four (24) hours of determining the exceedance. The notification shall include the following:

- (a) Dates covered during the reporting period;
- (b) Amount of VOC used during the reporting period;
- (c) Amount of VOC emitted during the reporting period;
- (d) Description of the cause of the exceedance; and
- (e) Description of any corrective action taken.

40 CFR Part 60 Subpart BBB, §60.546(f)(2)

Tire Curing and Finishing Operation (EU007)

Green tires are cured (vulcanized) in individual curing presses. Prior to being place in the press, each tire is sprayed with green tire spray, which acts as a mold release. The green tire spraying units are equipped with baffles to reduce PM emissions. Cured tires with white side walls are ground to expose

the white side wall. The white side wall is sprayed with a protectant coating. Cured tires are verified to meet specifications. Tire may be RIS ground to meet specifications. Also tires may require repair and additional grinding which occurs at a separate Tire Repair Station. Green Tire Sprayer No. 5 is controlled by an internal water bath system that does not exhaust outside. Green Tire Sprayer No. 6 is controlled by a wet scrubber. The white side wall (WSW) grinders 1-7 and the RIS grinders are controlled by cyclones. WSW8 exhausts to the basement.

NSPS:

Green Tire Sprayer No. 6 is subject to the applicable requirements in 40 CFR Part 60 Subpart BBB, "Standards of Performance for the Rubber Tire Manufacturing Industry". Green Tire Sprayer No. 5 is not subject to Subpart BBB because the tire sprayer was constructed prior to the January 20, 1983 applicability date for Subpart BBB. The remaining units in the tire curing and finishing operation are not subject to Subpart BBB because the units are not listed as affected facilities.

Emission Standards:

No more than 37.7 tons of VOC emissions associated with the use of silane shall be emitted from the curing operation during any consecutive twelve (12) month period.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Rubber cured at this facility shall contain no more than 1,538,845 pounds of silane during any consecutive twelve (12) month period.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Total particulate matter (PM) emissions from the Green Tire Spraying Operation shall not exceed 2.90 lb/hr.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Total PM emissions from the RIS Grinding Operation shall not exceed 1.30 lb/hr.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Total PM₁₀ emissions from the RIS Grinding Operation shall not exceed 0.60 lb/hr.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Total PM emissions from the White Sidewall Grinding Operation shall not exceed 4.20 lb/hr.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Total PM₁₀ emissions from the White Sidewall Grinding Operation shall not exceed 1.90 lb/hr.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Volatile Organic Compound (VOC) emissions from Green Tire Sprayer No. 6 shall not exceed 1.2 grams per tire sprayed with an inside green tire spray for each month.

40 CFR Part 60 Subpart BBB, §60.542(a)(5)(i)

Volatile Organic Compound (VOC) emissions Green Tire Sprayer No. 6 shall not exceed 9.3 grams per tire sprayed with an outside green tire spray for each month.

40 CFR Part 60 Subpart BBB, §60.542(a)(5)(i)

The sprays used by Green Tire Sprayer No. 6 shall contain less than one (1%) percent VOC by weight.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Expected Emissions:

The expected PM emissions are based on an engineering estimate and the amount of tires processed per year, the expected VOC emissions are based on PAL calculations for the last 12 months, and the expected HAP emissions are based on AP-42 emission factors and operating 8,760 hours per year. The expected emissions are shown below:

Pollutant	Tire Curing & Finishing Operations	
	lb/hr	TPY
PM ₁₀	0.23	1.01
PM _{2.5}	0.894	3.92
VOC	1.49	6.52
HAP	1.75	7.67

Periodic Monitoring:

An observation of instantaneous visible emissions from the stack associated with the wet scrubber shall be accomplished weekly while in operation by an individual certified to determine opacity.

ADEM Admin. Code r. 335-3-16-.05(c)

An observation of instantaneous visible emissions from the cyclone stacks shall be accomplished weekly while in operation by an individual certified to determine opacity.

ADEM Admin. Code r. 335-3-16-.05(c)

If the observed instantaneous opacity from any unit is greater than ten (10%) percent, a visible emissions observation shall be conducted within **thirty (30) minutes** of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.

ADEM Admin. Code r. 335-3-16-.05(c)

If the average opacity during any Method 9 visible emission observation exceeds ten (10%) percent, corrective action shall be initiated within **two (2) hours**.

ADEM Admin. Code r. 335-3-16-.05(c)

CAM:

These sources do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Recordkeeping and Reporting:

Records summarizing the monthly and twelve (12) month rolling total of silane usage at this facility shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

ADEM Admin. Code r. 335-3-16-.05(c)

Monthly and updated twelve (12) month silane usage inventories shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period.

ADEM Admin. Code r. 335-3-16-.05(c)

During any month, twelve (12) month period, or other compliance period during which there is an exceedance of one or more of the permitted emission limits, the Department shall be notified in writing within twenty-four (24) hours of determining the exceedance. The notification shall include the following:

- (a) Dates covered during the reporting period;
- (b) Amount of pollutant emitted during the reporting period;
- (c) Description of the cause of the exceedance; and
- (d) Description of any corrective action taken.

ADEM Admin. Code r. 335-3-16-.05(c)

Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

A semi-annual monitoring report shall be submitted to the Department **within sixty (60) days of the end of each semi-annual reporting period** as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates: September 1st through February 28th, and March 1st through August 31st of each calendar year. This report shall include the following:

- (a) Calendar dates covered in the reporting period;
- (b) All visible emissions (VE) exceedances;
- (c) A description of the cause of any exceedance;
- (d) A description of any corrective action taken;
- (e) A statement of certification of truth, accuracy, and completeness as described in General Proviso No. 9;
- (f) Signature of the responsible official as required by General Proviso No. 9.

ADEM Admin. Code r. 335-3-16-.05(c)

Records of the VOC content of each spray used by Green Tire Sprayer No. 6 shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

40 CFR Part 60 Subpart BBB, §60.545(f)

Green tire spraying (inside and/or outside) operation using water-based sprays containing less than 1.0 percent, by weight, of VOC as described in §60.543(b)(1) shall furnish the Administrator, within 60 days initially and annually thereafter, formulation data or Method 24 results to verify the VOC content of the water-based sprays in use. If the spray formulation changes before the end of the 12-month period,

formulation data or Method 24 results to verify the VOC content of the spray shall be reported within 30 days of the change.

40 CFR Part 60 Subpart BBB, §60.546(f)

Tringle Spraying Operation with Baghouse (EU015)

Metal tringles are sprayed with zinc stearate. Emissions are controlled by a baghouse.

NSPS:

This emission unit is not subject to 40 CFR Part 60 Subpart BBB, “Standards of Performance for the Rubber Tire Manufacturing Industry” because the units are not listed as affected facilities.

Emission Standards:

Total particulate matter (PM) emissions from this unit shall not exceed 0.10 lb/hr.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Expected Emissions:

The expected PM emissions are based on an engineering estimate and the amount of tringle sprayed per year. The expected emissions are shown below:

Pollutant	Tringle Spraying Operation	
	lb/hr	TPY
PM ₁₀	0.03	0.13
PM _{2.5}	0.01	0.04

Periodic Monitoring:

An observation of instantaneous visible emissions from the stack associated with the baghouse shall be accomplished weekly while in operation by an individual certified to determine opacity.

ADEM Admin. Code r. 335-3-16-.05(c)

If the observed instantaneous opacity from any unit is greater than ten (10%) percent, a visible emissions observation shall be conducted within thirty (30) minutes of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.

ADEM Admin. Code r. 335-3-16-.05(c)

If the average opacity during any Method 9 visible emission observation exceeds ten (10%) percent, corrective action shall be initiated within **two (2) hours**.

ADEM Admin. Code r. 335-3-16-.05(c)

CAM:

These sources do not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Recordkeeping and Reporting:

Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer’s certification, observed opacity, and any corrective actions taken during

each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

A semi-annual monitoring report shall be submitted to the Department **within sixty (60) days of the end of each semi-annual reporting period** as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates: September 1st through February 28th, and March 1st through August 31st of each calendar year. This report shall include the following:

- (a) Calendar dates covered in the reporting period;
- (b) All visible emissions (VE) exceedances;
- (c) A description of the cause of any exceedance;
- (d) A description of any corrective action taken;
- (e) A statement of certification of truth, accuracy, and completeness as described in General Proviso No. 9;
- (f) Signature of the responsible official as required by General Proviso No. 9.

ADEM Admin. Code r. 335-3-16-.05(c)

Dual Fuel Boilers

- **EU009 – 50.0 MMBtu/hr Natural Gas, No.2 and No. 6 Fuel Oil Fired Boiler (Boiler 3)**
- **EU010 – Two (2) 25.0 MMBtu/hr Natural Gas and No. 2 Fuel oil Fired Boilers (Boiler 1 & 2)**

Description

NSPS:

These boilers are not subject to 40 CFR Part 60 Subpart Dc, “Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units” because the boilers were constructed before the applicability date of June 9, 1989 for Subpart Dc.

MACT:

These boilers are subject to the applicable requirements in 40 CFR Part 63 Subpart JJJJJ, “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources”.

Emission Standards:

The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

40 CFR Part 63 Subpart JJJJJ, §63.11205(a)

No more than a combined total of 35,000 gallons of No. 2 fuel oil shall be burned in Boilers 1 & 2 during any consecutive twelve (12) month period.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

No more than 1,627,908 gallons of No. 6 fuel oil shall be burned in Boiler 3 during any consecutive twelve (12) month period.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Sulfur content of the fuel oil burned in Boilers 1 & 2 shall not exceed 0.5% by weight.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Sulfur content of the fuel oil burned in Boiler 3 shall not exceed 1.8% by weight.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Fuel oil shall not be burned in the boilers simultaneously, except during change over.

ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD)

Expected Emissions:

The expected emissions are based on AP-42 emission factors, burning natural gas, and operating 8,760 hours per year. The expected emissions for all three boilers are show below:

Pollutant	Boilers	
	lb/hr	TPY
PM₁₀/ PM_{2.5}	0.75	3.29
SO₂	0.05	0.219
NO_x	9.76	42.75
CO	8.20	35.92
VOC	0.53	2.32

Periodic Monitoring:

The Permittee must conduct biennial tune-ups of each boiler based on the requirements in §63.11223(b)(1) through §63.11223(b)(7).

40 CFR Part 63 Subpart JJJJJ, §63.11223(a) & (b)

When firing fuel oil, an observation of instantaneous visible emissions from the stacks associated with these units shall be accomplished daily by an individual certified to determine opacity.

ADEM Admin. Code r. 335-3-16-.05(c)

If the observed instantaneous opacity is greater than ten (10%) percent, a visible emissions observation shall be conducted within thirty (30) minutes of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.

ADEM Admin. Code r. 335-3-16-.05(c)

If the average opacity during the Method 9 visible emission observation exceeds ten (10%) percent, corrective action must be initiated within two (2) hours.

ADEM Admin. Code r. 335-3-16-.05(c)

Compliance with the fuel oil sulfur content limit shall be determined from either a certification provided by the fuel oil supplier or laboratory test results obtained by the Permittee.

ADEM Admin. Code r. 335-3-16-.05(c)

CAM:

These sources are uncontrolled; therefore, CAM does not apply.

Recordkeeping and Reporting:

The Permittee must keep the records as required by §63.11225(c).

40 CFR Part 63 Subpart JJJJJ, §63.11225(c)

The Permittee must submit a biennial compliance report as required by §63.11225(b).

40 CFR Part 63 Subpart JJJJJ, §63.11225(b)

Monthly, and twelve (12) month rolling total natural gas and fuel oil usage in this boiler must be kept in a form suitable for inspection. The records also shall be retained in a permanent form suitable for inspection for at least five (5) years from the date of generation and shall be made available upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

If utilized, fuel oil supplier certificates shall contain the name of the oil supplier and a statement from the oil supplier that the oil complies with the sulfur content limit, and shall be kept in a permanent form suitable for inspection for a period of five (5) years from the date of generation and shall be made available upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

A semi-annual report summarizing the type and quantity of each fuel burned in this unit shall be submitted to the Department within sixty (60) days of the end of each semi-annual reporting period as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates: September 1st through February 28th, and March 1st through August 31st of each calendar year. This report shall include the following:

- (a) Calendar dates covered in the reporting period;
- (b) Amounts of each fuel combusted in this unit during the reporting period;
- (c) Twelve (12) month rolling total of each fuel burned in this boiler during the reporting period;
- (d) A tabulated summary of fuel oil supplier certification(s);
- (e) A statement of certification of truth, accuracy, and completeness as described in General Proviso No. 9.
- (f) Signature of the responsible official as required by General Proviso No. 9.

ADEM Admin. Code r. 335-3-16-.05(c)

Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

ADEM Admin. Code r. 335-3-16-.05(c)

A semi-annual monitoring report shall be submitted to the Department within sixty (60) days of the end of each semi-annual reporting period as determined by the anniversary dates of the permit. The semi-annual monitoring periods shall cover the following dates: September 1st through February 28th, and March 1st through August 31st of each calendar year. This report shall include the following:

- (a) Calendar dates covered in the reporting period;
- (b) All visible emissions (VE) exceedances;
- (c) A description of the cause of any exceedance;
- (d) A description of any corrective action taken;
- (e) A statement of certification of truth, accuracy, and completeness as described in General Proviso No. 9;
- (f) Signature of the responsible official as required by General Proviso No. 9.

ADEM Admin. Code r. 335-3-16-.05(c)

MACT Subpart ZZZZ – Existing Fired Emergency Generators

- **Three (3) 285 HP Diesel Fired Emergency Fire Pump Engines**

These emergency generators are classified as Subpart ZZZZ – Existing Emergency Generators, because they were manufactured before the applicability dates in 40 CFR Part 60 Subpart IIII therefore they are only subject the 40 CFR Part 63 Subpart ZZZZ. These emergency generators are not subject to 40 CFR Part 60 Subpart IIII “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines” because these generators were manufactured before the applicability date of April 1, 2006. These emergency generators are subject to the applicable requirements in 40 CFR Part 63 Subpart ZZZZ “National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE)”.

NSPS Subpart IIII:

Subpart IIII applies to owners and operators of engines that commence construction after July 11, 2005, where the engines are manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006. These compression ignitions generators were manufactured before July 1 2006, so Subpart IIII does not apply.

40 CFR Part 60 Subpart IIII, §60.4200(a)(3)

Emission Standards:

MACT Subpart ZZZZ:

These units are subject to the applicable requirements listed in Table 2d of 40 CFR 63 Subpart ZZZZ— National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

40 CFR Part 63 Subpart ZZZZ, §63.6603(a)

The Permittee must operate and maintain these units according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent

practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

40 CFR Part 63 Subpart ZZZZ, §63.6625(e)(3)

The Permittee must install a non-resettable hour meter for each unit if one is not already installed.

40 CFR Part 63 Subpart ZZZZ, §63.6625(f)

These units may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of these units are limited to 100 hours per year. There is no time limit on the use of these units in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. These units may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in 40 CFR 63 Subpart ZZZZ, is prohibited.

40 CFR Part 63 Subpart ZZZZ, §63.6640(f)(1)

Expected Emissions:

The expected emissions are based on AP-42 emission factors and a maximum operation of 500 hours per year. All the Subpart ZZZZ – Existing Emergency Generators are shown below:

Pollutant	All Subpart ZZZZ Generators	
	lb/hr	TPY
PM ₁₀ / PM _{2.5}	1.84	0.46
SO ₂	1.72	0.43
NO _x	26.4	6.60
CO	5.68	1.42
VOC	2.16	0.54

MACT Monitoring:

The Permittee shall perform the following activities:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Or utilize an oil analysis program as describe in §63.6625(i).

40 CFR Part 63 Subpart ZZZZ, Table 2d(4) & §63.6625(i)

If an oil analysis program is utilized for a stationary compression ignition engine, the Permittee must perform the oil analysis at the same frequency specified above for changing the oil. The Permittee must at a minimum analyze the following parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new, viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new, or percent water content (by volume) is greater than 0.5. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later.

40 CFR Part 63 Subpart ZZZZ, §63.6625(i)

CAM:

These sources are uncontrolled; therefore, CAM does not apply.

Recordkeeping and Reporting:

The Permittee must keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

40 CFR Part 63 Subpart ZZZZ, §63.6625(i)

The Permittee must keep records of the maintenance conducted on these units in order to demonstrate that you operated and maintained these units and after-treatment control device (if any) according to your own maintenance plan.

40 CFR Part 63 Subpart ZZZZ, §63.6655(e)

The Permittee must keep records of the hours of operation of each engine that is recorded through the non-resettable hour meter. The facility must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

40 CFR Part 63 Subpart ZZZZ, §63.6655(f)

Plant-Wide Applicability Limit (PAL)

Michelin North America, Inc. is subject to a PAL emission limitation for VOCs.

Applicability:

Any physical change in or change in the method of operation of this facility that maintains its total source-wide emissions below the PAL level, meets the requirements in 335-3-14-.04-(23)(a) through (o), and complies with the PAL permit:

- (a) Is not a major modification for the PAL pollutant;
- (b) Does not have to be approved through the PSD program

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

The Permittee shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, synthetic minor limit, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under Rule 335-3-14-.05 unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

The PAL established in this permit only addresses the applicability criteria for VOCs under the state PSD Rule 335-3-14-.04. Any modifications to this source remain subject to applicable construction permit requirements in Rule 335-3-14 and the Title V operating permit modification procedures of Rule 335-3-16-.13 or 335-3-16-.14.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

This PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit VOCs at the facility.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

This PAL shall have a PAL effective period of 10 years from the date of issuance.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

If the Permittee applies to renew this PAL in accordance with 335-3-14-.04(23)(j)(2), then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

If the PAL expires, the Permittee is subject to the requirements of Rule 335-3-14-.04(23)(i).

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

Emission calculations for compliance purposes must include emissions from startups and shutdowns.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

Emission Standards:

The annual emission limitation for this facility for this PAL shall be **457.90 Tons** of **VOC** in any consecutive rolling 12 month period (Tons per Year (TPY)). This PAL shall regulate emissions of **VOC**. For each month during the PAL effective period after the first 12 months of establishing this PAL limit, the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months shall be less than the PAL limit (a 12-month total, rolled monthly). For each month during the first 11 months from the PAL effective date, the Permittee shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL shall be less than the PAL limit.

ADEM Admin. Code r. 335-3-14-.04(8)

Compliance:

The calculation procedures that the permittee shall use to convert monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by 335-3-14-.04 (23)(l).

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

The Permittee using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

- (a) Provide a demonstrated means of validating the published content of VOC that is contained in or created by all materials used in or at the emission units;
- (b) Assume that the emission units emit all of the VOC that is contained in or created by any raw material or fuel used in or at the emission units, if it cannot otherwise be accounted for in the process; and
- (c) Where the vendor of a material or fuel, which is used in or at the emission units, publishes a range of pollutant content from much material, the Permittee must use the highest value of the range to calculate the VOC emissions unless the Director determines there is site-specific data or a site-specific monitoring program to support another content within the range.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

The Permittee using emissions factors to monitor VOC emissions shall meet the following requirements:

- (a) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
- (b) The emissions units shall operate within the designated range of use for the emission factor, if applicable; and
- (c) If technically practicable, the Permittee of a significant emission units that relies on an emission factor to calculate VOC emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the Director determines that testing is not required.

For curing, Michelin shall validate the factor by reviewing the tire types that are being cured in comparison to the types that were used for the AP-42 factor testing and assuring that the correct tire types are being used to estimate VOC emissions. In addition, Michelin shall use the highest (worst case) factor for VOC to assure that the estimate is the worst case and results in the highest VOC emissions estimate. A record shall be kept the validation data.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

Re-validation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the Director. Such testing must occur at least once every 5 years after issuance of the PAL.

For curing, Michelin shall re-validate as described above in 14 (c) once every 5 years.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

Periodic Monitoring:

The Permittee will monitor all emissions units in accordance with the provisions under 335-3-14-.04(23)(l).

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

Recordkeeping and Reporting:

The Permittee shall retain the records under 334-3-14-.04(23)(m) on site. Such records may be retained in an electronic format.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

A copy of all records necessary to determine compliance with any requirement of 335-3-14-.04-(23) and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record shall be retained.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

All records required under this PAL shall be kept on site. Such records may be retained in an electronic form. Accurate and understandable records will be maintained in a form suitable for inspection and be available immediately upon request. Copies of any records or background documentation will be provided upon request.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

A copy of the following records shall be retained for the duration of the PAL effective period plus 5 years:

- (a) A copy of the PAL permit application and any applications for revisions to the PAL; and
- (b) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

Semi-annual monitoring reports and prompt deviation reports for this PAL permit shall be submitted to the Director in accordance with the schedule and requirements of the Title V Operating Permit for this facility.

- (a) *Semi-annual report.* This report shall contain the following information:
 - (1) The identification of the Permittee and the permit number.
 - (2) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to 335-3-14-.04-(23)(m)1.
 - (3) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
 - (4) A list of any emissions units modified or added to the facility during the preceding 6-month period.
 - (5) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - (6) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 335-3-14-.04-(23)(l)7.
 - (7) A signed statement by a responsible official (as defined in 335-3-16) certifying the truth, accuracy, and completeness of the information provided in the report.
- (b) *Deviation report.* The Permittee shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted

pursuant to 335-3-16-.05(c)3.(ii) shall satisfy this reporting requirement. The reports shall contain the following information:

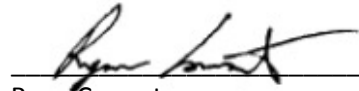
- (1) The identification of the Permittee and the permit number;
- (2) The PAL requirement that experienced the deviation or that was exceeded;
- (3) Emissions resulting from the deviation or the exceedance; and
- (4) A signed statement by a responsible official (as defined in 335-3-16) certifying the truth, accuracy, and completeness of the information provided in the report.

- (c) *Re-validation results.* The Permittee shall submit to the Director the results of any re-validation test or method within 3 months after completion of such test or method.

ADEM Admin. Code r. 335-3-14-.04(23)(a) through (o)

Recommendation:

Based on the above analysis and pending the resolution of any comments received during the 30-day public comment period and 45-day EPA review, I recommend issuing Michelin North America, Inc.'s Title V MSOP renewal.



Ryan Cowart
Industrial Minerals Section
Energy Branch
Air Division

June 9, 2015

Date